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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,277	02/24/2004	Maurizio Tamburro	CM2601MC2	3843

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EXAMINER	
PIERCE, JEREMY R	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/785,277	TAMBURRO ET AL.	
	Examiner	Art Unit	
	Jeremy R. Pierce	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/24/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-10 in the reply filed on June 24, 2005 is acknowledged. Claims 11-16 and 19-21 have been cancelled. Claims 1-10 remain pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the European Patent Office on August 24, 2001. It is noted, however, that applicant has not filed a certified copy of the European application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohnishi et al. (U.S. Patent No. 6,524,508).

Ohnishi et al. disclose chitosan containing acrylic fibers (Abstract). The chitosan is formed into a salt and penetrated into the acrylic fibers so that it will not be washed away by subsequent post-treatments (column 7, lines 32-44). The average particle size of the chitosan is between 1 and 100 nm (column 4, lines 21-31). The acrylic fibers meet the limitation of an absorbent member because acrylic is hydrophilic. Also, Ohnishi et al. disclose that the acrylic fibers may be mixed with other known hydrophilic fibers such as cotton, rayon, and wool (column 6, lines 59-65). With regard to claims 2, 9, and 10, the region of chitosan particles will be present on the surface when the acrylic fibers are present on the surface of the fabric, and Ohnishi et al. disclose the fabric may be made entirely of the acrylic fibers (column 6, lines 48-51).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelkenberg (U.S. Patent No. 5,496,933) in view of Kellenberger et al. (U.S. Patent No. 4,699,823) and Sackmann et al. (U.S. Patent No. 5,635,569).

Kelkenberg teaches providing chitosan salts as powder in hygienic articles. Kelkenberg teaches the particles may be water soluble (column 3, lines 35-47). Kelkenberg discloses that the particle sizes are much less than 1 mm (column 2, line

25) and that some particles are smaller than 1 micron (column 2, lines 26-27). Kelkenberg does not specifically teach an average particle size of less than 300 microns or the composition of the hygienic article. Kellenberger et al. teaches a diaper material comprising a topsheet, backsheet, and absorbent core (See Figure 2). The absorbent core is hydrophilic (column 4, line 43) and also comprises superabsorbent powder (column 5, lines 9-23). Kellenberger et al. teaches that the absorbent particles in one region of the core should have particles average less than 300 microns in size (column 6, lines 47-49). Sackmann et al. also teaches that smaller particle sizes in superabsorbent materials allows for more rapid liquid intake (column 3, lines 44-48). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the Kelkenberg chitosan salt particles in a diaper at the size of 300 microns or less in the region adjacent the backsheet in order to provide a diaper with rapid intake towards the bottom of the core, as taught by both Kellenberger et al. and Sackmann et al. With regard to claims 2, 9, and 10, one can see about 100% of the back surface of the diaper in Kellenberger et al. is covered by regions of superabsorbent particles (Figures 2-4 and 6). Additionally, it is noted that the surface need not be covered 100% with particles to meet the claim limitation, but only needs to be covered with 100% regions containing particles. With regard to claim 4, lowering the average particle size to between 10 and 800 nm is adjusting a result effective variable because Sackmann et al. teach that particle size is variable that affects the rate at which the particles absorb liquid. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use chitosan salt particles with an

average size of 10 to 800 nm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272 (CCPA 1980). With regard to claim 5, Kelkenberg teaches only 20% of the chitin is acetylated (column 2, lines 46-48). With regard to claim 6, the chitosan can be mixed with lactic acid (column 4, line 16). With regard to claim 7, Kellenberger et al. teach the batt is air-formed (column 4, lines 43-44). With regard to claim 8, Kellenberger et al. teach the superabsorbent should be present in an amount between 12 and 15% by weight of the batt. Thus, the claimed amount of 0.1 to 200 g/m^2 of superabsorbent particles would be met so long as a person of ordinary skill in the art used an absorbent core that weighed between 0.8 and 1,333 g/m^2. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use between of 0.1 to 200 g/m^2 of superabsorbent particles in the absorbent core of Kellenberger et al., since such range is so broad that practicing outside of it would make it impractical to actually produce an absorbent article.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,833,487 in view of Kellenberger et al. and Sackmann et al. The claims of the '487 Patent disclose an absorbent member containing chitosan salt particles. Although the claims are silent as to the size of the particles, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use chitosan salt particles at the size of 300 microns or less in the region adjacent the backsheet in order to provide a diaper with rapid intake towards the bottom of the core, as taught by both Kellenberger et al. and Sackmann et al. Also, it would be obvious to use particles between 10 and 800 nm in size because optimizing result effective variables involves only routine skill in the art, as set forth above.

9. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,867,287 in view of Kellenberger et al. and Sackmann et al. The claims of the '287 Patent disclose an absorbent member containing chitosan salt particles. Although the claims are silent as to the size of the particles, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use chitosan salt particles at the size of 300 microns or less in the region adjacent the backsheet in order to provide a diaper with rapid intake towards the bottom of the core, as taught by both Kellenberger et al. and Sackmann et al. Also, it would be obvious to use particles

between 10 and 800 nm in size because optimizing result effective variables involves only routine skill in the art, as set forth above.

10. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,887,564 in view of Kellenberger et al. and Sackmann et al. The claims of the '564 Patent disclose an absorbent member containing chitosan salt particles. Although the claims are silent as to the size of the particles, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use chitosan salt particles at the size of 300 microns or less in the region adjacent the backsheet in order to provide a diaper with rapid intake towards the bottom of the core, as taught by both Kellenberger et al. and Sackmann et al. Also, it would be obvious to use particles between 10 and 800 nm in size because optimizing result effective variables involves only routine skill in the art, as set forth above.

11. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/785,464. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '464 Application claims an absorbent member having chitosan salt particles with similar particle size ranges. Also, similar dependent claims are present.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-10 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/021,634. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '634 Application claims an absorbent member having chitosan salt particles with similar particle size ranges. Also, similar dependent claims are present.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on normal business hours, but works flextime hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JRP

Jeremy R. Pierce
August 10, 2005

ELIZABETH M. COLE
PRIMARY EXAMINER